MB-M-248

16 March 1961

Dear Doc,

Enclosed herewith is Frank's trip report, as we discussed on the phone today. Will you let us know promptly what action you plan to take.

Thanks.

Milt

Milt

mb

Enclosure - 2

16 March 1961

25X1A

TO: [redacted]

FROM:

SUBJ: Trip Report

25X1A

COPIES:

Purpose of trip was to discuss (1) light diffusion in SO-132 film and (2) suggestions for large film roll handling and packaging.

NOTE: Upon examining processed SO-132 with high magnification, light scattering was noticed when the film was viewed through the base. Also, bubbles or particles in the pelloid were noted. These effects are not present in SO-243 film.

The light diffusion makes densitometry very difficult with our densitometer, since either the image must be viewed through the base or the slit must be imaged through the base. This diffusion effect is likely to cause problems in the making of high resolution prints. In addition, the diffusion effect dictates the viewing of images on SO-132 with the emulsion toward the observer; the image then is a mirror-image of the original scene.

1. Light Diffusion In SO-132 Film

25X1A
25X1A
25X1A

The difficulties we encountered with SO-132 film were initially discussed with [redacted]. This was followed by a non-classified-type discussion which included [redacted] of [redacted]. They had not encountered this difficulty when they performed microdensitometry with the film because their microdensitometer does not image a slit through the base nor is the image viewed through the base. Instead, the image is viewed from the emulsion side and the slit is located directly in front of photomultiplier. We then viewed our samples of sine-wave targets on SO-132 under microscope, and they realized that a problem existed when the film is viewed through base, by eye, by light sensitive detector, or by optics used in printing.

The "bubbles" we noticed are actually "matte particles" put in the pelloid to form a rough pelloid surface which is required to avoid

ferrotyping and other difficulties (e.g. optical contact "locking", when the pelloid is in contact with an emulsion layer for long periods, as in the case of a roll of film, where pelloid contacts emulsion). We then removed the pelloid from the sample, and the matte particles were thereby removed. However, the light diffusion effect was still present. The source or cause of diffusion could not be immediately explained. 25X1A [redacted] is planning to investigate this matter. No schedule for this was established.

2. Film Handling, Packaging

25X1A [redacted] mentioned that a layer of neoprene or other compressible material will be placed inside the flanges of film rolls, so that the neoprene would comply with film stacking variation, and that a mechanical stop will be incorporated in the tie pins to limit the degree of tension which can be applied on the edges of the film by the neoprene-covered flange surface.

25X1A It was also suggested that [redacted] visit this contractor to obtain a first-hand picture of the system's supply and take-up mechanism and to discuss methods of loading and unloading film. The final design of the film packaging could then incorporate any possible modifications which would enhance loading and unloading.

25X1A [redacted]

FS:mb